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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/726,608	12/04/2003	Alexander Schnell	033275-420	6934
21839 7	21839 7590 10/19/2005		EXAMINER	
	INGERSOLL PC	KASTLER,	KASTLER, SCOTT R	
(INCLUDING BURNS, DOANE, SWECKER & MATHIS) POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			ART UNIT	PAPER NUMBER
			1742	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

V	T

		Application No.	Applicant(s)			
Office Action Summary		10/726,608	SCHNELL ET AL.			
		Examiner	Art Unit			
		Scott Kastler	1742			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠	Responsive to communication(s) filed on 16 Au	iaust 2005.				
		action is non-final.	•			
′—	Since this application is in condition for allowan		secution as to the merits is			
,—	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	i3 O.G. 213.			
Dienociti	on of Claims					
· _	on of Claims					
-	Claim(s) <u>1-12</u> is/are pending in the application.		:			
	4a) Of the above claim(s) is/are withdrawn from consideration.					
·	Claim(s) is/are allowed.					
·	Claim(s) <u>1-12</u> is/are rejected.					
	Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	election requirement	•			
٥/١	are subject to restriction and/or	election requirement.				
Applicati	on Papers					
9)[	The specification is objected to by the Examiner	<del>-</del> .				
10)⊠ The drawing(s) filed on <u>04 December 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
	Applicant may not request that any objection to the o	frawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)	The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.			
Priority u	ınder 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
	1. Certified copies of the priority documents	have been received.				
	2. Certified copies of the priority documents	• •				
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
			į			
Attachment		,, <b>-</b>				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date						
3) Inform	3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  5) Notice of Informal Patent Application (PTO-152)					
Pape	r No(s)/Mail Date	6)				

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## Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of copending Application No. 10/726,542 in view of the admitted prior art of the instant disclosure. Although the conflicting claims are not identical, they are not patentably distinct from each other because firstly, the step of "determining" either the service metal temperature or the depletion cannot be relied upon to fairly further limit any of the claims because these steps are a) not connected to any actual physical process step and therefore constitute no more than a non-limiting mental, calculation and b) the actual steps of determining either of these properties are not described in the claims. Secondly, the claims of the '542 application allow for the instantly claimed heat treating steps, where the admitted prior art of the instant disclosure (see page 5 line 19) teaches that the instantly recited heat treatments are typical for MCrAlY coatings. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the standard heat treatments known at the time the invention was made as taught by the admitted prior art of the instant disclosure, for heat treating the turbine blades of the '542 application.

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This is a provisional obviousness-type double patenting rejection.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of
Antonelli or Antonelli et al in view of the admitted prior art of the instant disclosure. Both of the
Antonelli and Antonelli et al articles teach methods including measuring the electrical
conductivity and magnetic permeability of a MCrAlY coating on a turbine blade through the use
of a multi-frequency eddy current system (see the abstracts of both articles for example) for the
purpose of measuring the Al depletion of the coating layer thereby showing all aspects of the
above claims except the use of the instantly recited heat treatments or specific MCrAlY alloy.
The admitted prior art of the instant disclosure teaches both that a MCrAlY alloy and heat
treatments fully meeting the requirements of the instant claims (see the instant specification at
page 5 for example) was known as a preferred MCrAlY alloy and heat treatment for turbine
blade applications at the time the invention was made. Because the turbine blades of both of
Antonelli and Antonelli et al would also desire the improved properties afforded by the alloy and
heat treatment of the admitted prior art of the instant disclosure, motivation to employ the
MCrAlY alloy and heat treatment of the admitted prior art of the instant disclosure as the alloy

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and heat treatment of either of Antonelli or Antonelli et al would have been modifications obvious to one of ordinary skill in the art at the time the invention was made.

## Response to Arguments

Applicant's arguments filed on 8/16/2005 have been fully considered but they are not persuasive. Applicant's arguments that the measurement methods disclosed by the Antonelli references are not suitable for the instantly claimed MCrAlY alloys are not persuasive because the Antonelli references do not limit their disclosed measurement methods to any particular type of MCrAlY alloy or phase. Applicant's further argument that the Antonelli references do not disclose the newly added heat treatment steps for forming an equilibrium microstructure in the coating has been considered and as a result, the rejections of the claims based upon either the Antonelli references alone or in view of Singheiser have been withdrawn. However, the above rejection, necessitated by the applicants amendment of the instant claims, has been advanced.

Finally, since applicant has not argued the rejection, or supplied a terminal disclaimer, the provisional obviousness type double patenting rejection of the instant claims has been maintained.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Scott Kastler Primary Examiner Art Unit 1742

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